

Specification Sheet Milliken Non-Reactive Standard High Moisture Modular Carpet Pressure Sensitive Adhesive

(4-gallon or 15.1L size)

Milliken Non-Reactive Standard Modular Carpet Adhesive is an acrylic emulsion adhesive specially formulated for use with Milliken Modular Carpets. This formulation contains no reportable solvents and meets or exceeds all CRI "Green Label" requirements. While providing a high degree of tack and resistance to lateral movement, it will also allow removal of the carpet squares to facilitate access to electrical lines, telephone lines, etc. as well as allowing for the replacement of worn, damaged or stained squares.

PRODUCT DESCRIPTION

Packaging	4- gallon pail with pour spout
Weight Per Gallon	8.5 lbs. / gallon ± 0.25 lbs.
Base	Acrylic Emulsion
Color	Wet: Mint Green Dry: Maintains a green tint
Consistency	Thin Syrup
Solvent	No; Water based
Solids	58% by weight minimum
Flammability	Non-flammable in wet state
Storage	Adhesive and carpet modules must be stored between 40°F and 100°F (4°C and 38°C)
On Site	Carpet, adhesive and area must be conditioned to between 60°F and 90°F (15°C and 32°C) 24 hours prior to, during and after installation.
Freeze-thaw	Protect from freezing.
Shelf Life	Two year stored in original container tightly sealed
Set-Up Time	Varies with humidity temperature and air velocity
Bonding Duration	Indefinite when kept clean
Clean-up from Carpet	Water when still wet – safety solvent when dry

MULTIPLE CLEANINGS MAY BE REQUIRED TO EFFECTIVELY REMOVE DRIED ADHESIVE FROM THE FACE OF THE CARPET.

IN SOME CASES WHERE THE ADHESIVE HAS BECOME IMBEDDED IN THE FIBER, IT MAY BE NECESSARY TO REPLACE THE TILE IN QUESTION.

FLOOR PREPARATION GUIDELINES

ALWAYS REFER TO AND FOLLOW THE INSTALLATION INSTRUCTIONS PROVIDED WITH THE CARPET IF THERE ARE QUESTIONS.

NOTE: The following are guidelines. Financial responsibility for bringing any floor into conformance with these guidelines must be determined prior to beginning work. The installation contractor cannot be held responsible for structural problems with the subfloor.

- Floor preparation in accordance with ASTM F710-11 unless specifically allowed per this document.
- All topical membrane forming concrete curing compounds must be removed prior to application of adhesive.
- Concrete subfloor must be structurally sound, clean, dust free, smooth, trowel finish (not burnished) and level. Cracks and holes in excess of 1/8" (3.2mm) should be filled with a Portland Cement based floor patching material such as W.W. Henry 547 Unipro™, DAP "Webcrete 98", Maipei "PlaniPatch", Ardex "Featherfinish" or similar. Gypsum based compounds are not recommended.
- Milliken modular carpet backings are non-reactive and contain no P.V.C. or plasticizers. This greatly simplifies the floor
 preparation process and in the vast majority of cases eliminates the necessity of old adhesive removal. All Milliken
 Modular carpets carry the "Lifetime Floor Compatibility" warranty. Milliken is not responsible for subfloor conditions.
 The installer has the responsibility for obtaining a successful installation.
- No chemical incompatibility exists between Milliken modular carpet or Milliken Modular Carpet Adhesive and any
 existing floor covering adhesive. This includes "cutback", asphalt emulsion, general-purpose adhesive, epoxy and any
 other commonly found flooring adhesives.
- The only physical requirement for existing adhesive films is that they be smooth, non-tacky, and that residual trowel notches be reduced to 1/32"(0.8mm) or less. In most cases the removal of the existing floor covering accomplishes this with only normal sweeping, cleaning, and patching required prior to beginning installation.
- Regardless of adhesive type, the existing layer should have minimal residual tack. There is no chemical reaction;
 however, excessive tack may cause the carpet modules to become bonded too aggressively to the floor over time. This
 tack can be "minimized" by sifting Portland Cement based patch powder into the existing film and sweeping away the
 excess or by applying a very thin layer of Portland patch.
- If additional smoothing is required and residual adhesive is black (cutback or asphalt emulsion) smoothing **must** be accomplished by applying a very thin layer of one of the above patching compounds.
- NEVER scrape, sand or mechanically abrade any exposed black adhesive or any existing resilient floor. These may contain asbestos.
- If residual adhesive is **not** black, scrape or sand until smooth and non-tacky as required.
- Protruding objects must be removed. Floor must be flat (not undulating) to within 1/4" in 12' (6.4mm across 3.66m) with no abrupt changes.
- Sealing or other post treatment of concrete floors is at the discretion of the installation contractor. In general, properly
 cured (90 days minimum) steel trowel finished concrete requires no additional treatment. Excessively porous or dusty
 concrete slabs are the only exceptions. Please call Milliken Technical Services if you have questions. Durabond D250 is a
 recommended product should this type of treatment be deemed necessary; however, any non-silicone based sealer will
 work acceptably with non-PVC backings. This treatment is NOT intended to be a corrective for out of specification water
 vapor transmission levels.
- When working with a Gyp-Crete or Gypsum subfloor, Milliken recommends sealing with a gypsum floor sealer prior to installation. Failure to do so will result in an unacceptable installation. Gyplock Sealer by Cornerstone Coatings International Inc. is a suitable sealer.
- Carpet should be stored between 40°F and 100°F (4°C to 38°C) and must be conditioned to between 60°F and 90°F (15°C and 32°C) prior to and during installation.
- Floor temperature should be 60°F (15°C) minimum for proper adhesive curing and performance.

NOTE: If your subfloor is contaminated with an oily residue either from removal of "cutback" during asbestos abatement or from a previous end use such as metal fabrication, this residue MUST be totally removed or covered prior to applying modular adhesive and carpet. In addition, if residual adhesive – either "cutback" or general purpose has been damaged/reactivated by previously

installed PVC-backed carpet, call Milliken Technical Services for guidance. The "Lifetime Floor Compatibility" warranty does NOT apply in these situations.

APPLICATION:

Apply in accordance with Milliken's Modular Carpet installation instructions printed on each box or pallet of the modular product being used when:

- New Pour:
 - 1. It is a new pour > 90 days.
 - 2. Slab is on or above grade.
 - 3. No visible water on the surface.
 - 4. ASTME E-1745 Class B minimum conforming Vapor Retarder is in place in accordance with ACI 302-2001 and directly in contact with the concrete placement.
 - 5. Bond test required with archived photo documentation.
- o Renovation On grade:
 - 1. Confirmed vapor barrier in place or Rh does not exceed 95% as measured by the in situ Relative Humidity Probe Test (per latest version of ASTM F2170.
 - 2. No visible water on the surface.
 - 3. Bond test required with archived photo documentation.
- o Renovation Above grade:
 - 1. No visible water on the surface.
 - 2. Bond test required with archived photo documentation.

Milliken Modular Carpet installation instructions are also available on line: http://www.millikencarpet.com

COVERAGE RATES:

- Comfort Plus® and Underscore™ cushionback full spread for all tile sizes: 35 to 40 sq. yds. / gallon (9.5 to 10 sq. m./liter).
- In extreme environments such as casinos and convention centers which will routinely experience extreme rolling loads in excess of 5,000lbs (2272Kg.), a heavier full spread of adhesive is recommended. Target coverage for this end use is 20 to 25 sq. yds./gallon (5 to 6 sq. m./liter) for the 100V product.

NOTE: THE ONLY RECOMMENDED ADHESIVES ARE MILLIKEN MODULAR CARPET ADHESIVES. USE OF OTHER ADHESIVES SHIFTS ALL INSTALLATION AND ADHESIVE LINKED LIABILITY TO THE ENTITY RESPONSIBLE FOR THE USE OF THE NON-APPROVED PRODUCT. WARRANTIES ON CARPET ARE NOT AFFECTED BY ADHESIVE CHOICE UNLESS THE ADHESIVE CAN BE SHOWN TO HAVE CAUSED DAMAGE. MILLIKEN NON-REACTIVE STANDARD MODULAR ADHESIVE IS APPLIED WITH A 3/4 TO 1" NAP PAINT ROLLER OR A 1/32" X 1/32" X 1/16" NOTCHED TROWEL.

ALL MODULAR CARPET ADHESIVE, REGARDLESS OF APPLICATION METHOD, OR USE ENVIRONMENT <u>MUST</u> BE ALLOWED TO DRY COMPLETELY BEFORE INSTALLING CARPET. FAILURE TO DO SO WILL MAKE REMOVAL, REPLACEMENT AND ROTATION OF THE MODULES VERY DIFFICULT.